

Reply to Editor Comments on Manuscript egusphere-2022-1084

Title: Biochar promotes soil aggregate stability and associated organic carbon sequestration and regulates microbial community structures in Mollisols from Northeast China

Author(s): Jing Sun et al.

In this final response, we performed the adjustment and corrections suggested by editor Raúl Zornoza, which considerably improved the quality and rigor of our manuscript. We have provided a point-by-point response to the reviews including a list of all relevant changes made in the manuscript.

The main corrections in the paper and the response to the comments are as following:

Topic editor decision:

1. Line 308: Replace "Our results demonstrated that soil bulk density of Mollisols soil had a negative correlation" by "Our results demonstrated that soil bulk density had a negative correlation". It is very reiterative soil, Mollosols, sol again.
◆ Author response: Thank you very much for your careful review and suggestions regarding our manuscript. Made the change as suggested.
Replaced “Our results demonstrated that soil bulk density of Mollisols soil had a negative correlation” with “Our results demonstrated that soil bulk density had a negative correlation”. **Line-308**
2. Line 321: Replace " increasing rate of biochar application rate" by " the increasing rate of biochar application"
◆ Author response: Thanks for the advice. Made the change as suggested.
Replaced “increasing rate of biochar application rate” with “the increasing rate of biochar application”. **Line-321**
3. Line 356: Replace "The N input enhancing aggregation possible is interpreted in three aspects" by "The relationship between N input and aggregation can be explained by three possible aspects"
◆ Author response: Thanks for the advice. Made the change as suggested.
Replaced “The N input enhancing aggregation possible is interpreted in three aspects” with “The relationship between N input and aggregation can be explained by three possible aspects”. **Line356**
4. Line 434: Delete the sentence "The N source always an important source of microbial nutrients". It makes no sense.

◆ Author response: We have deleted this sentence as suggested. Thank you again for your careful review.